Determined to realize a future in which people with cancer live longer and better than ever before

Syndax

Forward-looking statements disclosure

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "will," "expect," "plan," "anticipate" and similar expressions (as well as other words or expressions referencing future events or circumstances) are intended to identify forward-looking statements. All statements other than statements of historical facts contained in this presentation, including statements regarding future operations, financial results and the financial condition of Syndax Pharmaceuticals, Inc. ("Syndax" or the "Company"), including financial position, strategy and plans, the progress, timing, clinical development and scope of clinical trials and the reporting of clinical data for Syndax's product candidates, and Syndax's expectations for liquidity and future operations, are forward-looking statements. Many factors may cause differences between current expectations and actual results, including unexpected safety or efficacy data observed during preclinical or clinical studies, clinical site activation rates or clinical trial enrollment rates that are lower than expected, changes in expected or existing competition, failure of our collaborators to support or advance collaborations or product candidates and unexpected litigation or other disputes. Moreover, Syndax operates in a very competitive and rapidly changing environment. Other factors that may cause our actual results to differ from current expectations are discussed in Syndax's filings with the U.S. Securities and Exchange Commission, including the "Risk Factors" sections contained therein. New risks emerge from time to time. It is not possible for Syndax's management to predict all risks, nor can Syndax assess the impact of all factors on its business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statement. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this presentation may not occur and actual results could differ materially and adversely from those anticipated or implied. Except as required by law, neither Syndax nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. Syndax undertakes no obligation to update publicly any forward-looking statements for any reason after the date of this presentation to conform these statements to actual results or to changes in Syndax's expectations.

Company strategy

Syndax investment highlights

Entinostat

FDA BTD

Combo with exemestane:

- Phase 3 data 3Q18
- $$B US opportunity

Combo with anti-PD-(L)1:

- Signals in Mel, NSCLC
- Ongoing NSCLC, Mel, CRC, TNBC, Ovar trials
- Multiple data readouts

SNDX-6352

CSF1R antibody:

- Phase 1 multiple dose study ongoing
- Broad clinical dev potential
- Collaboration with AZ's Imfinzi®

Menin-MLLr inh

Onc driver specific:

- MLLr leukemias
- Oral presentation at AACR 2018
- IND in 2019

CRC - colorectal cancer; NSCLC - non-small cell lung cancer; Mel - melanoma; TNBC - triple negative breast cancer; Ovar - ovarian cancer

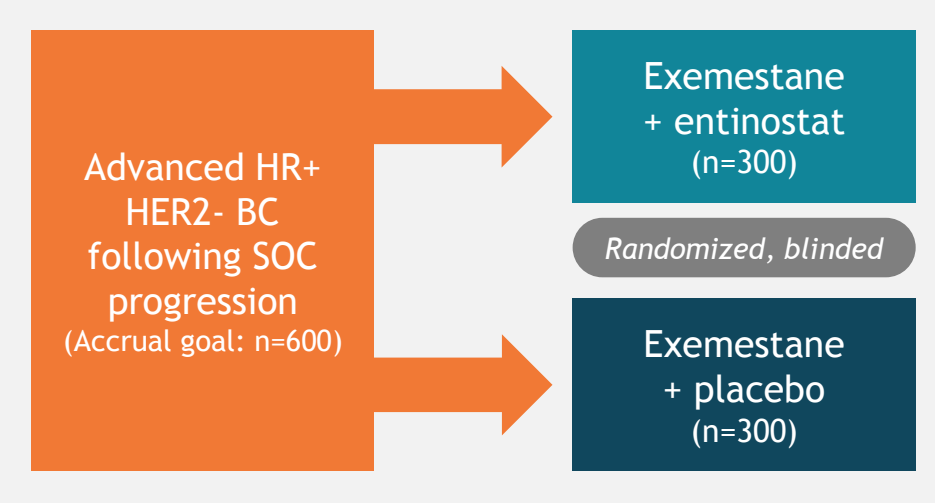
Previous milestones

ENTINOSTAT (Class 1 specific HDAC inhibitor)	Update	4Q17	1H18	2H18
ENCORE 601 - MEL (PD-1 pre-Tx) Phase 2 results			●	
ENCORE 601 - NSCLC (PD-1 pre-Tx) Phase 2 results			●	
ENCORE 601 – Go / No go decision on Stage 1 of MSS CRC cohort			●	
ENCORE 601 – Complete reg. agency discussions re: MEL dev path	✓	●		
E2112 – Per ECOG, complete Phase 3 enrollment; release PFS			●	
ENCORE 602 – Report topline TNBC results				●

SNDX-6352 (anti-CSF-1R mAB)	4Q17	1H18	2H18
Anticipate MAD trial data presentation (cancer patients)			●
Initiate Phase 1b combination trial (cancer patients)			●

E2112 to report Phase 3 data 3Q18

E2112: Exemestane +/- entinostat



E2112 Trial Milestones

- ✓ **4Q17:** Final PFS analysis; 1st interim OS analysis complete
- **3Q18:** Achieve full accrual; release PFS data
- **2H18:** File NDA
- **2017-20:** Interim OS analyses every 6 months, opportunity for early trial completion

FDA BTD

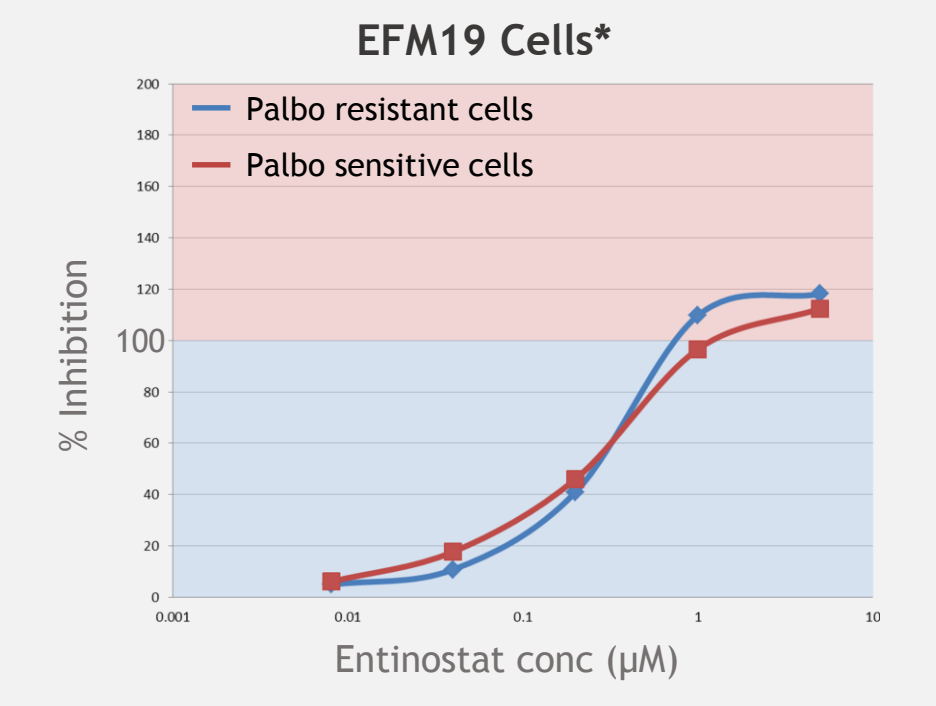
Two primary endpoints: PFS and OS

ECOG-ACRIN cancer research group
Reshaping the future of patient care

Syndax

E2112 uniquely positions entinostat as the preferred agent post-CDK4/6

- Physicians searching for ideal treatment regimen post CDK4,6
- 30-50% of pts in E2112 expected to have received a prior CDK4,6i
- Preclinical data indicates no cross resistance.



**Similar results observed in 2 other cell lines (MDA-MB-134 and MDA-MB-361)*

Source: Slamon - unpublished

Entinostat: Blockbuster potential as 2nd/3rd line therapy for HR+, HER2- metastatic breast cancer

First novel MOA in HR+ BC with Phase 3 data since CDK4/6

Leading treatment options - HR+, HER2- advanced breast cancer

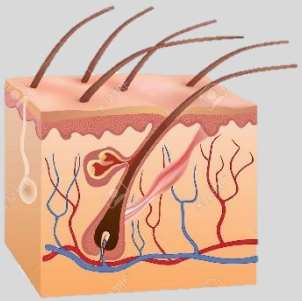
1st line hormone Tx	2nd/3rd/4th line hormone Tx	Chemo-Tx
Anastrozole or letrazole +/- CDK4,6 inhibitor	Anastrazole, Faslodex +/- CDK4,6 inhibitor or Afinitor-exemestane,	Capecitabine, gemcitabine, eribulin

34,000 pts

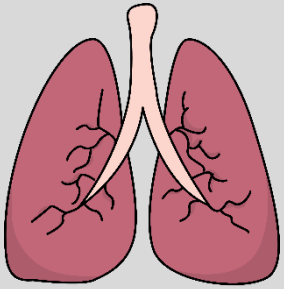
Entinostat-exemestane target population

Source: DataMonitor 2016 Breast cancer: HR+/HER2- Disease Coverage Report

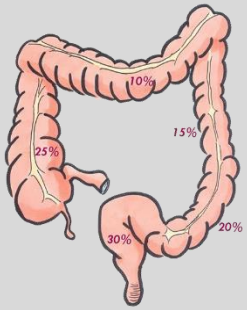
ENCORE Clinical Trial Program: Evaluating entinostat's potential to enhance anti-PD-(L)1 efficacy



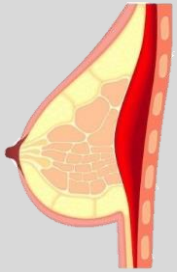
MEL



NSCLC

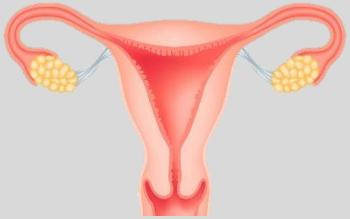


CRC



new

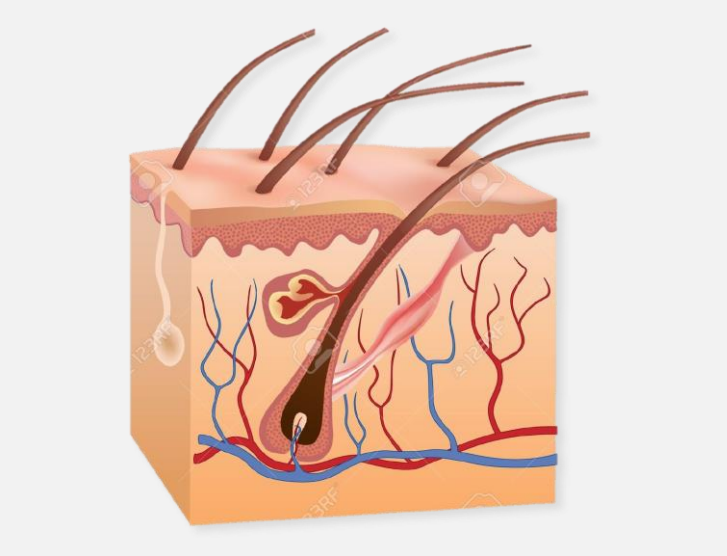
TNBC
HR+ BC



OVAR

PD-(L)1	Immune cells	Tumor mutational burden (TMB)	Nanostring

ENCORE 601 Phase 2 melanoma data 2Q18



ENCORE 601: PD-1 REFRACTORY MEL

Clin. meaningful response rate: ~20%

- CTLA-4 RR post PD-1[1]: 11-14%
- Chemo RR[2]: 4-11%

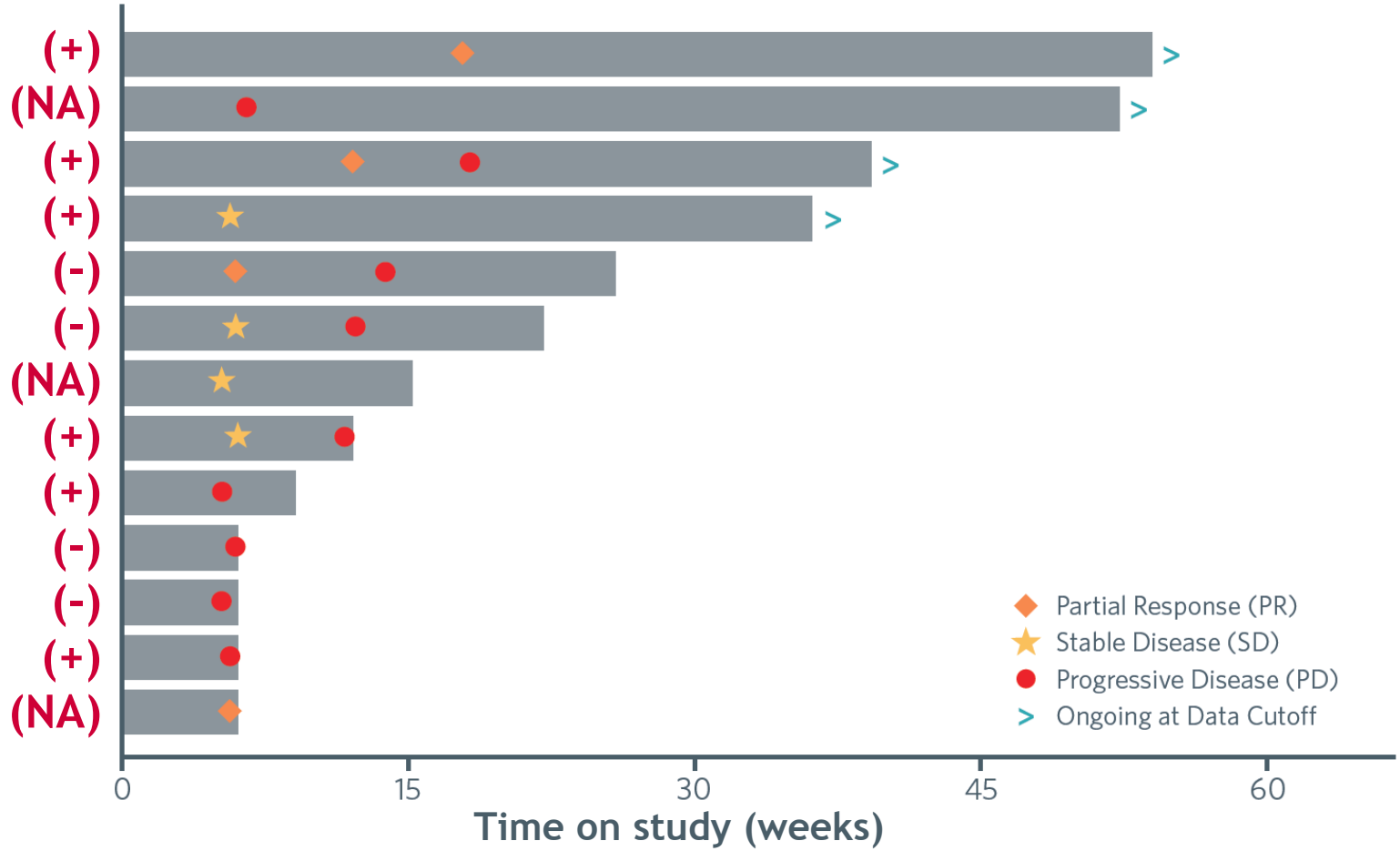
Anticipate presenting add'l Phase 2 results 2Q18

- Reported 31% (4/13) refractory to PD-1 benefited from combo (ASCO '17[3])
  - Expanding cohort to 52 pts

1. Long et al. Society for Melanoma Research 2016; 2. Weber et al., Lancet Oncology, 2015 (Checkmate 037, dacarbazine or paclitaxel). 3. Johnson, ML, et. al., ASCO poster 2017

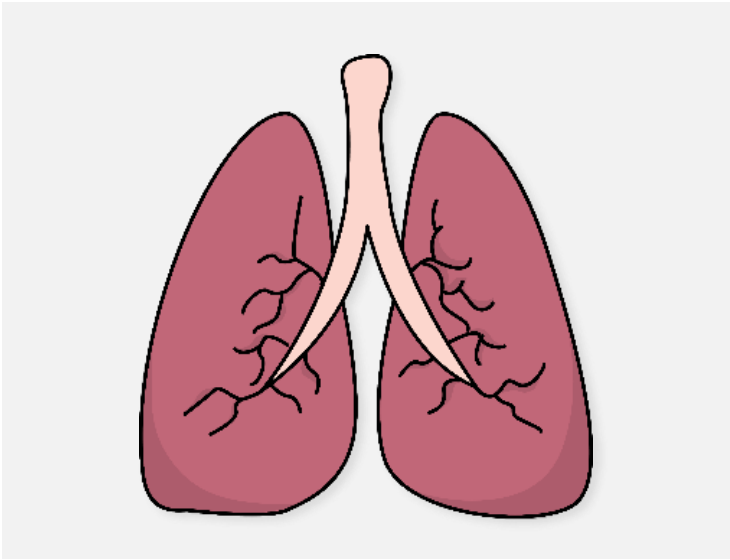
ENCORE 601 melanoma data (Stage 1, SITC) shows meaningful durable benefit in treated patients

PD-(L)1 status | **Treatment Duration, Patient Response**



(+), (-), (NA) denotes PD-(L)1 expression status

ENCORE 601 Phase 2 NSCLC data 2Q18



ENCORE 601:
PD-1 REFRACTORY NSCLC

Clin. meaningful response rate: ~15%

Anticipate sharing add'l Phase 2 results 2Q18

- Reported 10% (3/31) refractory to PD-(L)1 benefited from combo (SITC 2017[1])
  - Expanded cohort to 70 pts
  - Biomarker analysis ongoing to identify likely responders

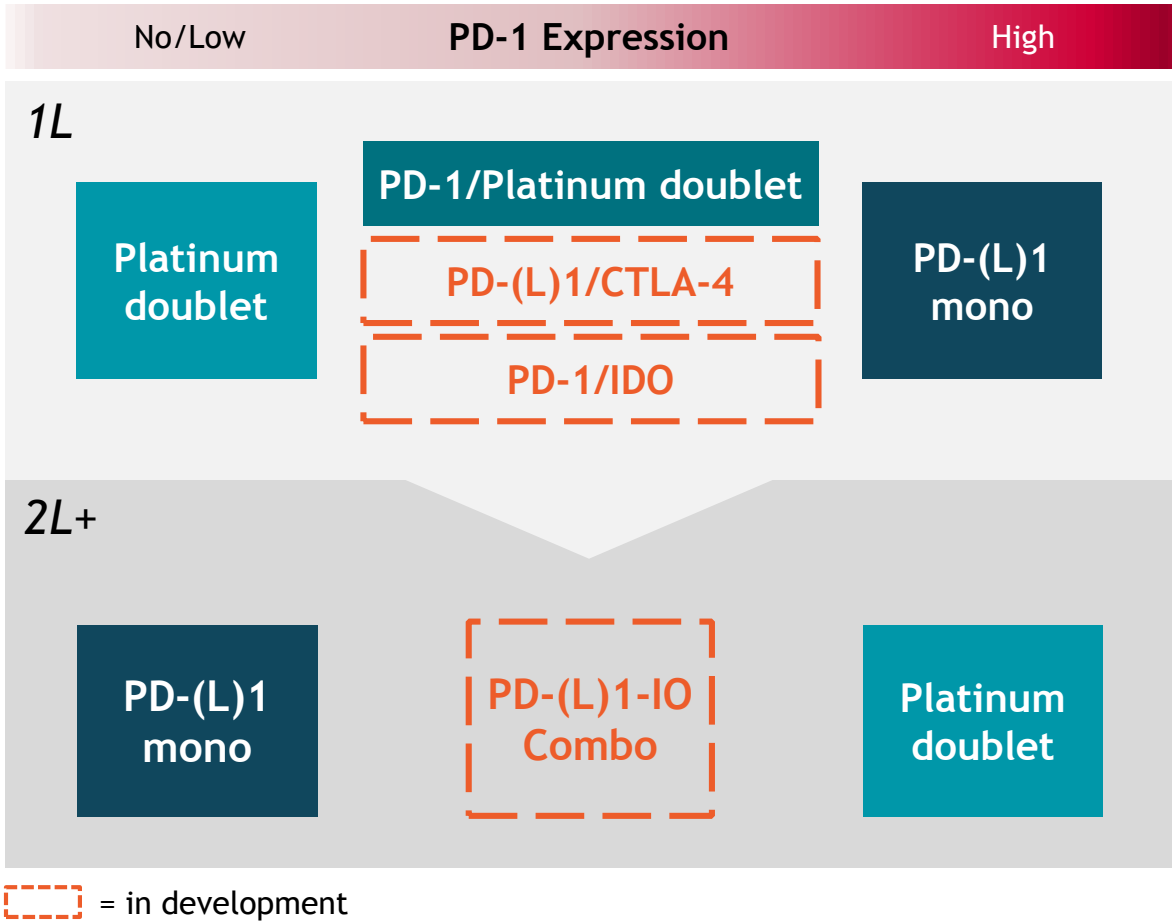
1. Johnson, ML, et. al., SITC poster 2017

Patient segmentation common in NSCLC therapy

120,000 pts expected to receive treatment for adv. NSCLC

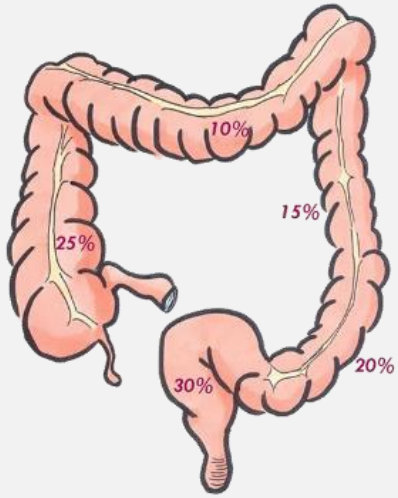
Biomarkers used to identify Tx responders (EGFR, ALK, PD-(L)1; TMB?, etc.)

Selection may enable entinostat-KETRUDA to provide a meaningful benefit for a subset of 2L NSCLC



Source: Kantar 2016 Treatment Architecture report; Trial Trove, SEER data

ENCORE 601 initial Phase 2 CRC data 2Q18



ENCORE 601:
PD-1 NAIVE MSS-CRC

Simon 2-stage design
Stage 1: 2 /13 responses to expand
Stage 2: enroll 21 add'l patients

Clin. meaningful response rate: ~15%

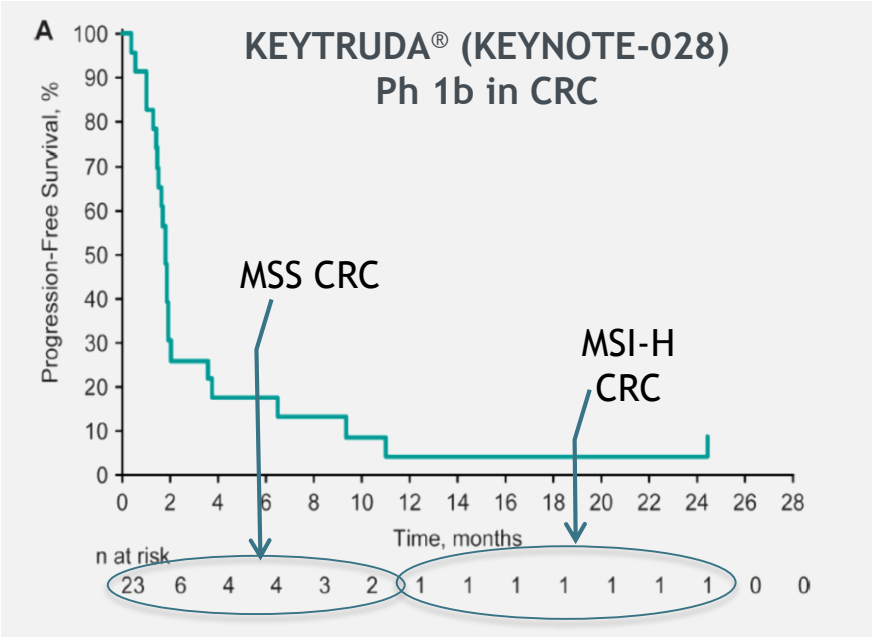
Anticipate sharing stage 1 results 2Q18

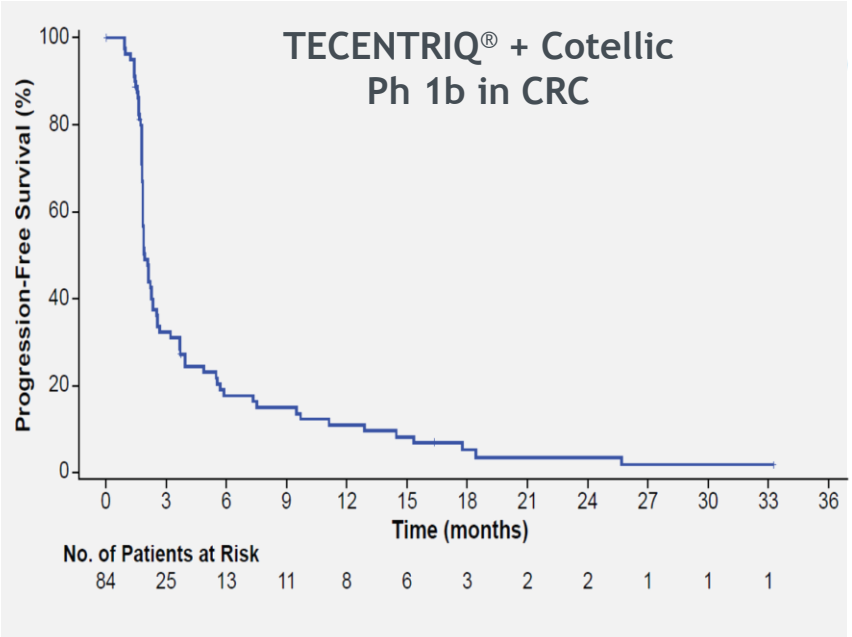
Response obs. with current options:

	PD-1[1]	Stivarga[2]
ORR	0%	1%
mPFS	1.8 mo	2 mo

Source: 1. O'Neil et. al., PLoS ONE 12(12): e0189848 2. Stivarga Prescribing Information

The threshold for improved efficacy is modest in MSS-CRC





No responses in PD-(L)1⁺ MSS pts (N=22)

- 6 mo CBR = 13% (95% CI, 3%-34%)
- mPFS 1.8 mos (95% CI, 1.4-1.9)
- 6-month PFS = 17.4%

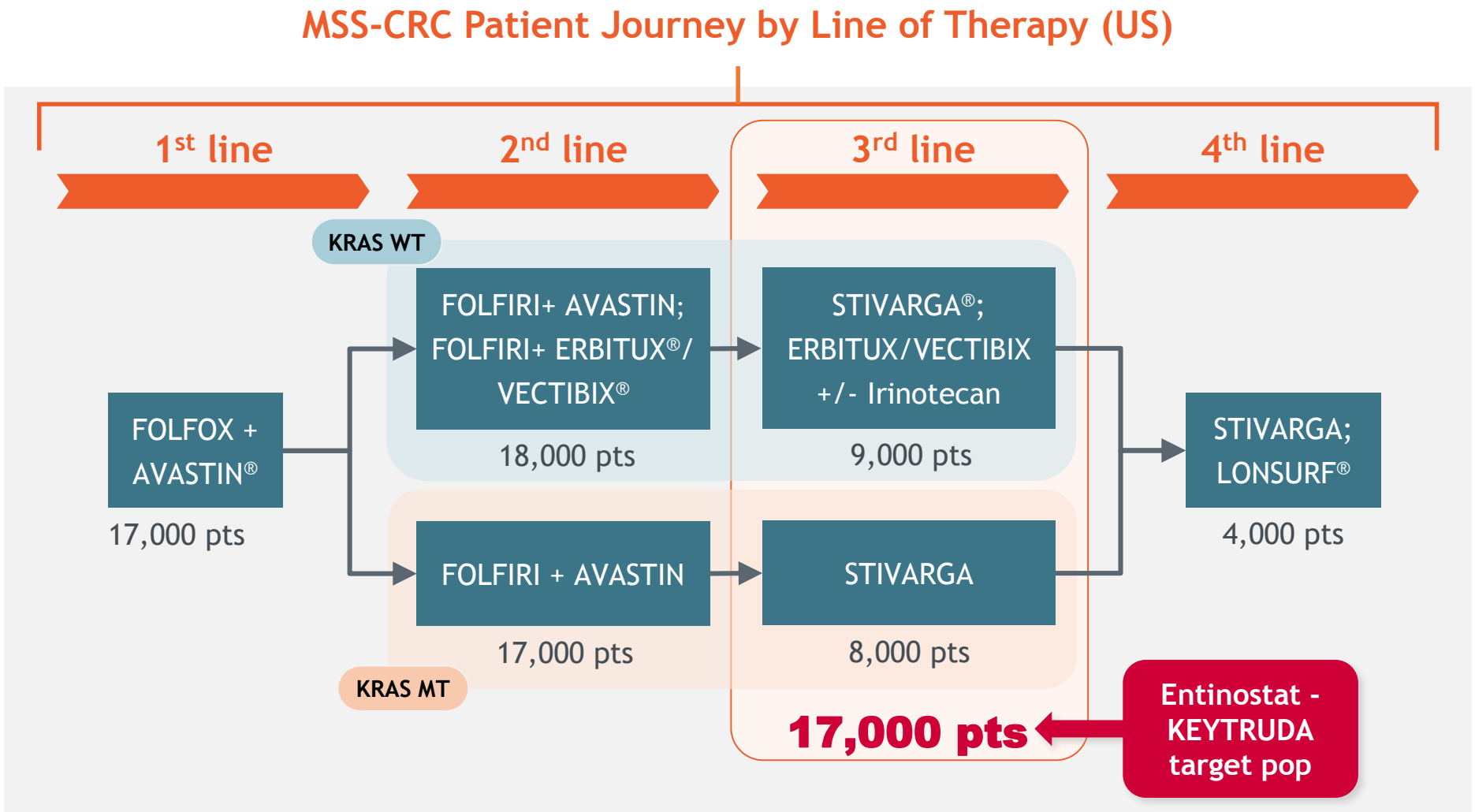
7 patients (8%) had a PR (N=84)

- mPFS 1.9 mos (95% CI, 1.8-2.3)
- 6-month PFS = 18%

O'Neil et. al., PLoS ONE 12(12): e0189848

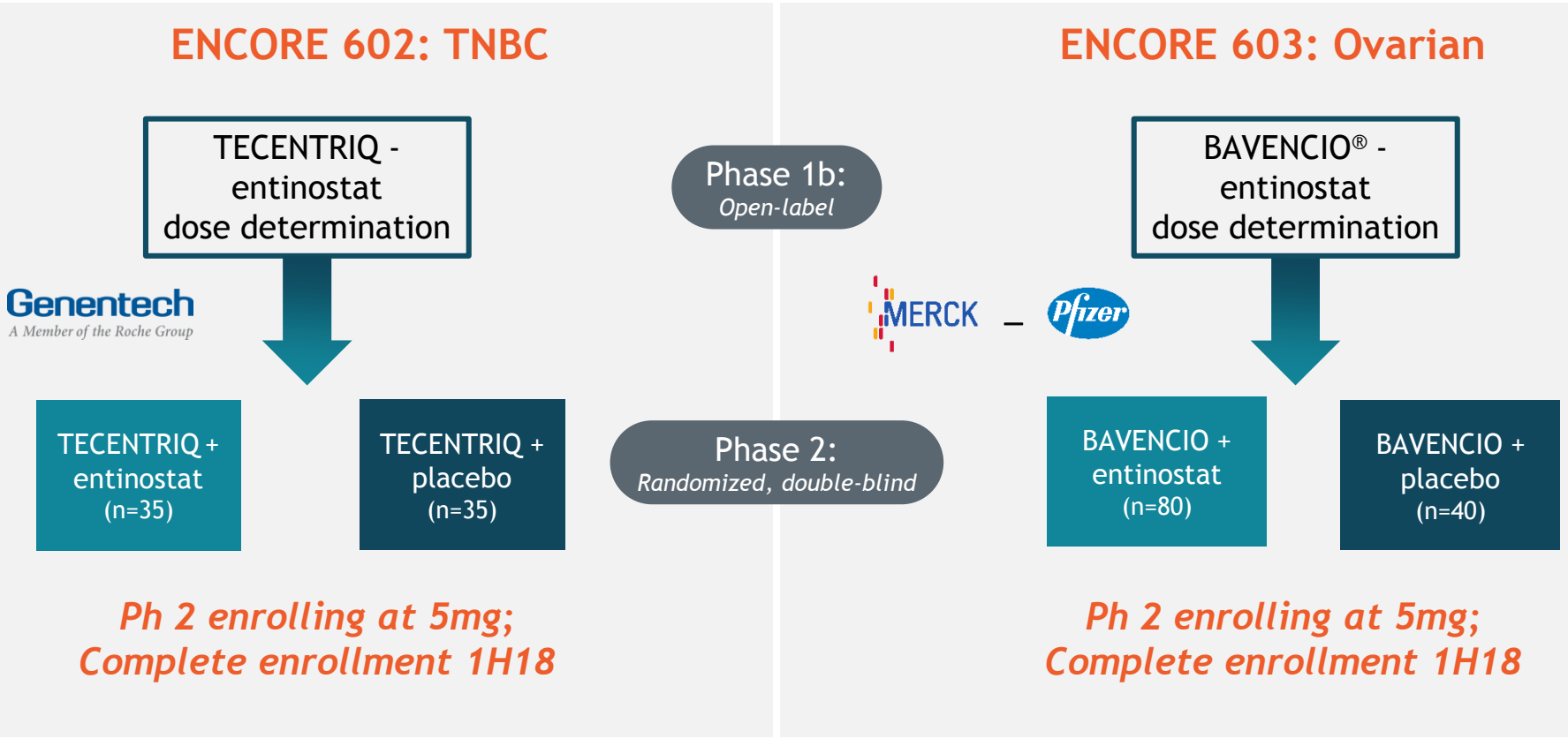
Bendell et. al., ASCO GU 2018

MSS-CRC represents a significant market opportunity



Source: Kantar 2016 Treatment Architecture report; Trial Trove, SEER data

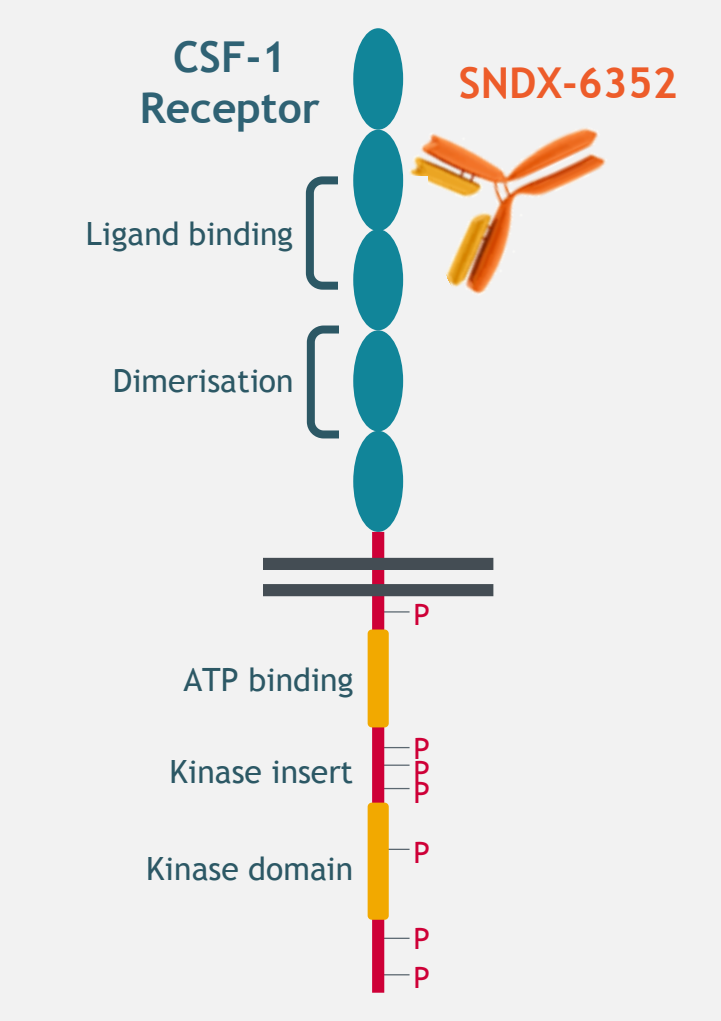
ENCORE 602 and 603



Phase 2 ENDPOINTS:

- Primary endpoint - PFS
- Secondary endpoint - Overall response rate (ORR)
- Secondary endpoint - Overall survival (OS)

SNDX-6352: Anticipate focused Phase 2 POC program



- High affinity, IgG4 (K_D = 4-8 pM)

✓ Multiple ascending dose (MAD, solid tumors) ongoing
  - Enrollment of 1st 2 cohorts complete

✓ Collaboration in place to broadly study combination with Imfinzi (AZ)
  - Phase 1b safety of combination expected to initiate 2Q18

- Communicate Phase 2 strategy 2H18

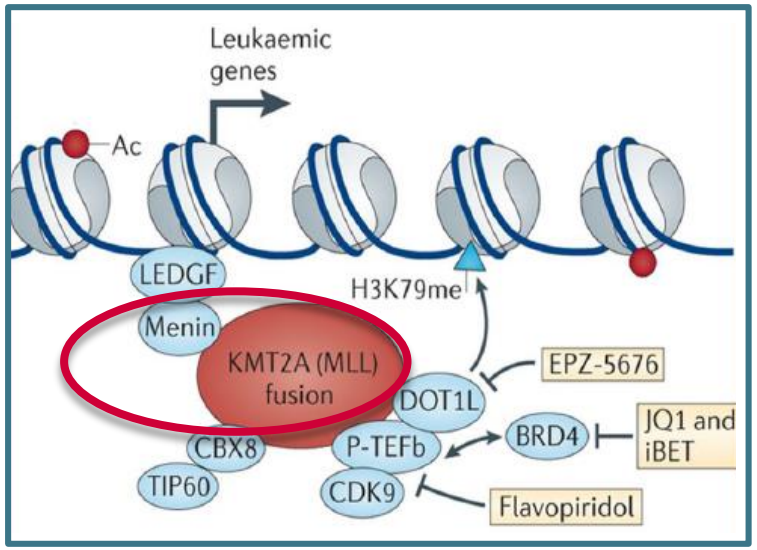
TAM – tumor associated macrophage; CSF-1R – colony stimulating factor -1 receptor

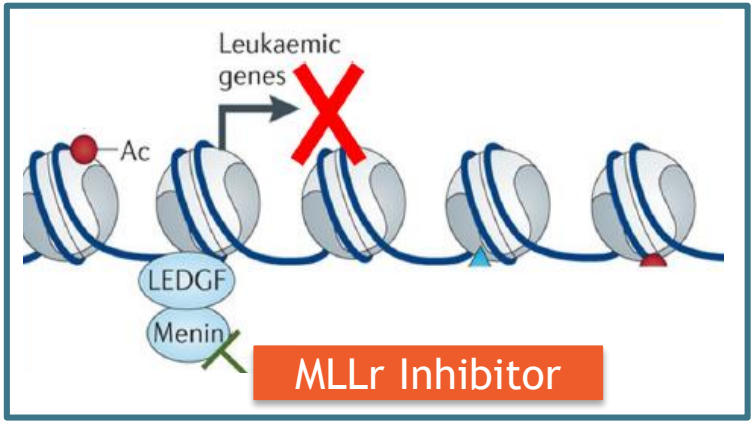
Source : Ordentlich, P. et al SITC 2016

Menin-MLLr program on track for IND Filing 1H19

Oral presentation at AACR

- **MLL-r known cause of leukemias (AML, ALL, MLL)**
- **Major market incidence: 4,000/yr (60% adults: 40% peds)**
- **Potential future indications:**
  - MDS, ALL, AML (incl. *NPM1*^{mut} AML and MLL-PTD AML)
  - CMML and CML
  - Pancreatic Cancer
  - Gain-of-function p53 mutation tumors





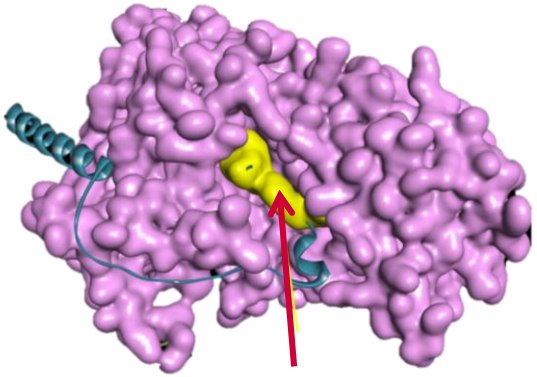
MLL-r = rearrangements of the Mixed Lineage Leukemia (MLL) gene

Proven ability to build the pipeline

3Q16: UCB

SNDX-6352

4Q17: Allergan/Vitae



Menin-MLLr inhibitors

- Established relationships enhance identification and access to quality assets
- Clinical development leadership enables competitive advantage
- Business development continues to be a core strength of our business

4Q17 financial highlights and 2018 guidance

Ticker	SNDX (NASDAQ)	
As of December 31, 2017		
Cash and short-term investments[1]	$133.2 million	
Common shares O/S[2]	24.4 million	
2018 Operating Expense Guidance		
	Q1	2018
R&D	$18-22 M	$67-76 M
Total Operating Expenses	$22-26 M	$86-96 M

1. *In October 2017 we earned $5.0 million milestone from KHK received in Q4 2017*
2. *In October 2017 we sold 2.0 million common shares to BVF with net proceeds of $24.8 million*

Upcoming milestones

ENTINOSTAT (Class 1 specific HDAC inhibitor)	1Q18	2Q18	3Q18	4Q18
Communicate registration strategy for entinostat in MEL		●		
ENCORE 601 - MEL (PD-1 pre-Tx) Phase 2 data presentation		●		
ENCORE 601 - NSCLC (PD-1 pre-Tx) Phase 2 data presentation		●		
ENCORE 601 – Go / No go decision on Stage 1 of MSS CRC cohort		●		
E2112 - Complete Phase 3 enrollment; release PFS		▬	▬	
ENCORE 602 – Report topline TNBC results				●

SNDX-6352 (anti-CSF-1R mAB)	1Q18	2Q18	3Q18	4Q18
Initiate Phase 1b combination trial (cancer patients)		●		
MAD trial data presentation (cancer patients)				●
Communicate Phase 2 development strategy			▬	▬

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Thank you. Questions?

Syndax